Curriculum Support Materials

Mission Geography focuses on ways NASA's missions use spatial analysis and other geographic skills to solve real-world problems.

These experiences are translated into learning modules at three grade-level groups:

- Kindergarten-Grade 4
- Grades 5–8
- Grades 9–12

All Mission Geography investigations meet two requirements:

- 1. They teach interesting and meaningful geography content by modeling geographic thinking and problem solving.
- 2. They involve learners in real-world contexts.

The key skills and techniques of geography and other sciences are used in each module to model the approaches used by scientists to explore Earth from the ground and from space.

Key interdisciplinary links are featured throughout these materials to illustrate the close connections between and among geography and other sciences, mathematics, and technology.



For more information

Mission Geography
http://missiongeography.org

National Aeronautics and Space Administration http://education.nasa.gov





Mission Geography is a partnership between the National Aeronautics and Space Administration and the Geography Education National Implementation Project.



http://genip.tamu.edu



Educational Product

Educators Grades K–12

EP-2002-03-404-HQ

National Aeronautics and Space Administration

MISSION GEOGRAPHY

Linking NASA and Geography



Mission Geography is curriculum support material that links the content, skills, and perspectives of *Geography for Life: National Geography Standards* with the National Aeronautics and Space Administration's missions and results. Mission Geography's goal is to excite and educate learners about geography, NASA's research and missions, and the world in which they live.

This educational product uses existing NASA data and images to engage students in active, hands-on inquiry, modeling the scientific method and developing students' understandings of environment-society relations and Earth Science.

http://missiongeography.org

Module Topics

Elementary [K-4]

- · Exploring Our Planet From Above
- · Water, Water Almost Everywhere
- · Where on Earth Do Humans Live?
- Paths

Middle School [5-8]

- Volcanoes—Local Hazards, Global Issue
- Mars and Earth—The Ouest for Life
- Human Footprints on Earth as Seen by NASA Scientists
- Remote Sensing and Geoarchaeology

High School [9-12]

- What's Up with Earth's Water Resources?
- Where Will Your Next Meal Come From?
 Inquiries about Food, People, and Earth.
- What Are the Causes and Consequences of Climate Change?

Materials Format

Mission Geography is distributed in two formats:

- CD-ROM
- Online at http://missiongeography.org

In both cases, the modules for each grade level are available as Adobe Acrobat PDF files.

The modules include "within the document" links to the essays from *Geography for Life*, a glossary of satellitebased sensors, and key images required for each investigation. Educators can



use the CD-ROM or downloaded PDF files as a standalone product or in an enhanced form using the Internet.

The Mission Geography Web site provides support for educators using the materials and a link between the CD-ROM and key Internet-based resources for educators and learners.

Mission Geography Online also includes:

- · teaching strategies;
- suggestions for extension and enrichment activities;
- links to age-appropriate literature for elementary grade learners;
- · correlations to State standards; and
- supplemental resources not included on the CD-ROM, including updates on module topics.

Each module and investigation, both on the CD-ROM and the Web site, provides all the background, images, and briefings educators and learners need to fully understand the featured concepts and generalizations.



Product Dissemination

Mission Geography educator training can be coordinated by contacting trained Geographic Alliance teacher consultants and NASA Aerospace



Education Specialists. For a listing of trainers, visit the Mission Geography Web site at http://missiongeography.org The Mission Geography CD-ROM can be ordered through the NASA Central Operations of Resources for Educators (CORE) for a minimal fee.

You can also obtain a copy through the NASA Educator Resource Center Network (ERCN) or through the Geography Education Implementation Project (GENIP).

NASA ERCN
For a listing of ERCs by State,
visit http://education.nasa.gov/ercn
GENIP

E-mail: *s-bednarz@tamu.edu* NASA CORE

Toll-Free Ordering Line: 866-776-CORE FAX Line: 866-775-1460

E-mail: nasaco@leeca.org World Wide Web: http://core.nasa.gov

Project Organization

Mission Geography is a collaboration between and among many education stakeholders:

- NASA and the geography education community, represented by GENIP;
- The science, technology, mathematics, and geography education communities through the Mission Geography Advisory Board; and
- Experienced geography educators, master geography classroom educators, university-based Earth scientists, and members of NASA's Aerospace Education Services Program (AESP) on the writing teams.